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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
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2143

MAIL DATE	DELIVERY MODE
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01/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/052,612

**Applicant(s)**

PISUPATI, RAVIKUMAR

**Examiner**

Joseph E. Avellino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-29, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-29, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-6, 8-29, and 31 are presented for examination; claims 1, 11, and 26 independent.

#### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4-6, 11, 13, 15, 16, and 21 are rejected under 35 USC 103(a) as being unpatentable over Tripathi (US 2002/0087619) in view of Aweya et al. (USPN 7,231,445) (hereinafter Aweya) in view of Peterson et al. (Computer Networks: A Systems Approach; Morgan Kaufmann Publishers; copyright 2000, pages 634-640) (hereinafter Peterson).

3. Referring to claim 1, Tripathi discloses a computer network for providing service (e.g. abstract) comprising:

a plurality of computing elements each of which comprise general-purpose, programmable computing resources that can be selectively programmed for supporting one or more of a plurality of different electronic services (i.e. request service relevant to a server), wherein said services are controlled or operated by commands or data transmitted by email (i.e. mail agent 350 receives email from client 310 via network and,

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based on the commands in the email, will contact servers 330, 340 to effect control of a command found within the email) (Figures 3,4, ref. 300, B430; p. 2, ¶ 30);

a redirector (i.e. mail agent) communicatively coupled to a mail server (any entity which receives mail inherently requires a connection to a mail server) and to each of the computing elements (i.e. servers 330 and 340), wherein said redirector receives email from the client via mail server, wherein each email contains a command or data specific for a service, with or without being addressed to a specific computing element (i.e. the email is directed to the mail agent), and wherein said redirector is configured to selectively match an computing element with a specific service request of an incoming email, whether or not said email is addressed to a specific computing element (i.e. email message may specify whether the service requested relates to a specific server), and forward at least a portion of the email to that computing element so as to delivery said command or data to that specific service, such that said redirector serves as an email proxy for said plurality of computing systems (i.e. mail agent receives an email which requests a particular service and may decipher the email message to ascertain the nature of the service requested by the user, and perform the service) (¶ 30-34);

wherein said electronic services are controlled by said email routed by said redirector among said plurality of computing elements (i.e. the elements are controlled based on the commands received in said email) (¶ 30-34).

Tripathi does not specifically state that the redirector matches the request to an available computing element, rather the mail agent merely returns the data when a command is received. In analogous art, Aweya discloses an admission control process

which can forward a request to an available web server system (col. 10, lines 15-28). It would have been obvious to one of ordinary skill in the art to combine the teaching of Aweya with Tripathi in order to utilize the admission control process of Aweya with a plurality of mail agents of Tripathi in order to redirect client requests to other web server systems when the present mail agent resources are running low, thereby reducing the likelihood of having to queue requests or even dropping requests as supported by Aweya (col. 10, lines 15-28).

Tripathi does not explicitly state the use of a mail server for receiving and routing email. In analogous art, Peterson discloses another computer network which uses an email server (i.e. mail gateway) to route mail from a sender to a recipient (Figure 9.6; p. 638: "in many cases the mail traverses one or more mail gateways on its route from the sender's host to the receiver's host"). It would have been obvious to one of ordinary skill in the art to combine the teaching of Peterson with Tripathi in order to provide an efficient method to have mail be routed to the correct recipient.

4. Referring to claim 4, Tripathi discloses the redirector comprises a service handler for extracting an access function from incoming email messages (i.e. service) and the service handler complies with the extracted access function by transmitting commands or data to at least one of the plurality of computing elements supporting said services (i.e. mail agent performs the service to produce a service outcome) (¶ 24).

5. Referring to claim 5, Tripathi discloses said commands or data comprises a service (i.e. execute actions, commands to enumerate status information, commands to set various parameters clearly fall within the definition of a "service") (§ 24).

6. Referring to claim 6, Tripathi discloses the commands or data comprises a specified location where a service can be accessed (i.e. service performer 120 may contact server 120, obtain health information from server and generate service outcome) (Figure 3; § 26).

7. Claims 11, 13, 15, 16, and 21 are rejected for similar reasons as stated above.

Claims 2, 3, 8, 9, 12, 17, 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tripathi-Aweya-Peterson in view of Motoyama (USPN 5,819,110).

8. Referring to claim 2, Tripathi- Aweya-Peterson discloses the invention substantively as described in claim 1. Tripathi-Aweya-Peterson does not specifically disclose the computing elements have a service handler configured to extract the service function from the email message. In analogous art, Motoyama discloses another computer network for providing services comprising each of the computing elements has a service handler (i.e. parsing process) (Figure 7; col. 7, line 62 to col. 8, line 10); and

said service handler on a computing element extracts an access function (i.e. action) from an incoming email message and complies with said extracted access function (Figure 6; col. 7, line 62 to col. 8, line 10).

It would have been obvious to one of ordinary skill in the art to combine the teaching of Motoyama with Tripathi-Peterson in order to allow the remote user of Tripathi (i.e. client 110) the ability to know the machine's capabilities, thereby ensuring that the user is fully aware what commands the devices can and cannot, or will not, execute, thereby increasing customer interaction.

9. Referring to claim 3, Tripathi-Peterson discloses the invention substantively as described in claim 1. Tripathi-Peterson does not specifically disclose the redirector routes email messages, rather interprets them. In analogous art, Motoyama discloses another computer network for providing services comprising a mail router (i.e. mail server) for routing email messages (col. 7, lines 27-44). It would have been obvious to one of ordinary skill in the art to combine the teaching of Motoyama with Tripathi-Peterson in order to allow the remote user of Tripathi (i.e. client 110) the ability to know the machine's capabilities, thereby ensuring that the user is fully aware what commands the devices can and cannot, or will not, execute, thereby increasing customer interaction.

10. Referring to claim 8, Tripathi-Peterson discloses the invention substantively as described in claim 1. Tripathi-Peterson does not specifically disclose using a firewall.

In analogous art, Motoyama discloses another computer network for providing services comprising a firewall 14 (Figure 1) through which email messages are received, said redirector being protected within said firewall (Figure 1; col. 7, lines 7-45). Motoyama does not disclose that the redirector and email server are protected via a common firewall, however it is well known that firewalls can protect computing entities from a wide area network. BY this rationale, "Official Notice" is taken that both the concept and advantages of providing for a firewall to protect the email processing center is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify the teaching of Motoyama and Tripathi-Peterson in order to allow the email processing center 100 the ability to ward off attacks and viruses from hackers. It would have been obvious to one of ordinary skill in the art to combine the teaching of Motoyama with Tripathi-Peterson in order to allow the remote user of Tripathi (i.e. client 110) the ability to know the machine's capabilities, thereby ensuring that the user is fully aware what commands the devices can and cannot, or will not, execute, thereby increasing customer interaction.

11. Referring to claim 9, Tripathi-Peterson discloses the invention substantively as described in claim 1. Tripathi-Peterson further discloses various web clients on the network (Tripathi: Figure 1, ref. 110). As shown above, a LAN can be protected from the WAN via a firewall. Therefore one of ordinary skill in the art would find it obvious that the web client is within the firewall communication with the redirector to obtain access to said services since it would ward off attacks and viruses form hackers.



12. Claims 12, 17, 18, and 24 are rejected for similar reasons as stated above.

Furthermore Motoyama discloses sending a response email message following compliance with said extracted access function (col. 8, lines 1-10).

Claims 10, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tripathi-Aweya-Peterson in view of Motoyama in view of Weber et al. (USPN 6,480,901) (hereinafter Weber).

13. Referring to claim 10, Tripathi-Peterson-Motoyama discloses the invention substantively as described in claim 9. Tripathi-Peterson-Motoyama does not specifically disclose generating web pages related to the services of the web client. In analogous art, Weber disclose the proxy server generating web pages related to the services for the client (Figure 7; col. 14, lines 23-41). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Weber with Tripathi-Peterson-Motoyama in order to allow the email clients of Motoyama to address the proxy server system of Weber in order to be able to incorporate a plurality of different devices utilizing different protocols to the network without requiring the user know beforehand what the specific form for the protocol and device in question, thereby providing a common platform for management as well as only one point wherein updates are required, thereby reducing complexity of the overall system.

14. Claims 19-20, are rejected for similar reasons as stated above.

Claims 22, 23, 26-29, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tripathi-Aweya-Peterson in view of Hartman et al. (US 2002/0156876) (hereinafter Hartman).

15. Referring to claim 22, Tripathi-Peterson discloses the invention substantively as described in claim 1. Tripathi-Peterson do not explicitly disclose launching a service on one of the computing elements. In analogous art, Hartman discloses a server (i.e. applications management server 12) which receives a request from a user in order to launch a service (e.g. abstract; ¶¶19-21). It would have been obvious to one of ordinary skill in the art to combine the teaching of Hartman with Tripathi-Peterson in order to provide the applications management server 12 of Hartman as the servers 330, 340 of Tripathi, since Tripathi discloses that the preformatted messages include commands to execute actions (Tripathi: ¶¶ 24), this would motivate one of ordinary skill in the art to find other commands which could be used to further configure the particular server, thereby incorporating Hartman and its method of installation of services.

16. Referring to claim 23, Tripathi discloses determining on which computer element to launch the service (i.e. based on the received emails, it will determine which computer needs the particular commands executed) (Tripathi: "service requested relates to a specific server" ¶¶ 30).

17. Claims 26-29, and 31 are rejected for similar reasons as stated above.
18. Referring to claim 32, Hartman discloses the specified location comprises a URL address (§17).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tripathi-Aweya-Peterson-Motoyama in view of Hartman.

19. Referring to claim 25, Tripathi-Peterson-Motoyama discloses the invention substantively as described in claim 24. Tripathi-Peterson-Motoyama do not explicitly disclose that the service handler downloads a service from an address taken from an incoming email message. In analogous art, Hartman discloses another computer network system which downloads a service from a particular address to install the service on the computer (§19-21). It would have been obvious to one of ordinary skill in the art to combine the teaching of Hartman with Tripathi-Peterson-Motoyama in order to provide the applications management server 12 of Hartman as the servers 330, 340 of Tripathi, since Tripathi discloses that the preformatted messages include commands to execute actions (Tripathi: § 24), this would motivate one of ordinary skill in the art to find other commands which could be used to further configure the particular server, thereby incorporating Hartman and its method of installation of services.

***Response to Arguments***

20. Applicant's arguments dated December 11, 2007 have been fully considered but are not persuasive.

21. Applicant argues, in substance, that Tripathi-Aweya-Peterson does not disclose the entirety of claim 1. The Examiner disagrees. Applicant is arguing against the references individually, and one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As outlined above, the combination of Tripathi-Aweya-Peterson clearly meet the claimed limitations. By this rationale, the rejection is maintained.

22. Applicant argues, in substance, that Tripathi does not disclose selectively matching a specific service request whether or not the email is directed to a particular computing element. The Examiner agrees. This limitation is based on a combination of Tripathi in view of Aweya. As shown above, the combination of Tripathi in view of Aweya clearly meet the claimed limitation. Aweya shows that a request addressed to a particular computing element is matched with an available element whether or not the request is directed to a particular computing element (i.e. a request received by a web server, the addressed computing element, is rerouted to a particular available

computing element) (e.g. abstract). This clearly demonstrates that a service request is routed to an available computing element regardless of if it is directed to a particular computing element or not. Applicant should also know that the phrase "whether or not the email is directed to a particular computing element" is open to interpretation. As such, the combination of Tripathi in view of Aweya clearly meet the limitation. By this rationale, the rejection is maintained.

23. Applicant argues, in substance, that Tripathi teaches away from the claimed invention and away from the proposed modification with Aweya since Tripathi specifies a specific server address in the email and not routed in the direction of a redirector as claimed. The Examiner disagrees. It would have been obvious to one of ordinary skill in the art to combine the teaching of Tripathi with Aweya by replacing the server cluster of Tripathi with the server cluster described in Aweya in order to realize the benefits described in Aweya to the server cluster of Tripathi, namely the ability to redirect requests based on probabilities resulting in less dropped requests (Aweya: col. 10, lines 15-28). By this rationale, the rejection is maintained.

24. Applicant argues, in substance, that impermissible hindsight has been used in the combination of Tripathi-Aweya-Peterson. The Examiner disagrees. Applicant must understand that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made,

and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As described in the rejections above, only knowledge within the level of ordinary skill has been used in the combination of the references and therefore the rejection is maintained.

25. Applicant argues, in substance, that the references do not teach forwarding at least a portion of the email to the particular computing element. The Examiner disagrees. Keeping in mind that the available computing element is determined by the redirection system described in Aweya, the information within the email of Tripathi is forwarded to the particular server element where the service is performed. In order to perform that particular service, relevant information must be extracted and forwarded to the particular server which performs the particular service (Tripathi: ¶ 28, "execute an action on the server" (in order to recognize what action to execute, the server must know what action to execute, which is information from the email), and ¶ 30 "relates to a specific server or applicable to ...all such servers"; Aweya: e.g. abstract, "distributing web server requests"). This clearly shows that the references meet the claimed limitations and therefore the rejection is maintained.

26. Applicant argues, in substance, that the cited references fail to disclose a redirector and mail server secured by a common firewall. The Examiner agrees. As stated above, "Official Notice" has been taken. Under the provisions of MPEP 2144.03,

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Applicant has failed to traverse this taking of Official Notice when made and therefore this assertion has been taken as Admitted Prior Art as explained in earlier Actions.

Applicant's traversal of the "Official Notice" used in claim 8 is improper, and the Examiner is not required to provide support for this assertion since it has been entered as Admitted Prior Art. This rejection is maintained.

27. Applicant's other arguments are believed to be met by the response above.

### ***Conclusion***

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

30. Applicant has failed to seasonably challenge the Examiner's assertions of well known subject matter in the previous Office action(s) pursuant to the requirements set forth under MPEP §2144.03. A "seasonable challenge" is an explicit demand for evidence set forth by Applicant in the next response. Accordingly, the claim limitations the Examiner considered as "well known" in the first Office action are now established as admitted prior art of record for the course of the prosecution. See *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Joseph E. Avellino/  
Joseph E. Avellino, Primary Examiner  
January 12, 2008